Life Safety Training Program

If your facility does not have the following code books, you need to get them asap:

1. 2012 NFPA 101 Life Safety Code Book – **start** in chapter 19 for existing building (more than likely) or chapter 18 for new building

If you are not sure which one your building is, contact us.

From chapter 19 or 18 you would then go to the chapter, section, and/or paragraph chapter 19 or 18 sends you to.

Example:19.2.4.1 sends you to 7.4.1.1 –

The first number is the chapter (either 19 or 7 from above example)

The second number is the section (2 or 4 from above example)

The third number is the subsection (4 or 1 from above example)

The fourth number is the statement (1 or 1 from above example)

2. 2012 NFPA 99 Health Care Facilities Code Book - per CFR 483.90 only the following chapters 1-6, 9-11, 14 and 15 apply to a healthcare facility.

ADPH Staff

General Office Number: 334 206-5177

Life Safety:

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Roland Wynn – Surveyor
Mac Davis – Surveyor
Dale Hamilton – Surveyor
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Website:

- alabamapublichealth.gov/facilitiesmanagement

Go to:
alabamapublichealth.gov/facilitiesmanagement


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Ambulatory Surgical Centers (ASC) and End Stage Renal Disease (ESRD) - Life Safety Code Booklet
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Emergency Preparedness Requirements
Life Safety Training Program
Resources
Federal Quality, Safety and Oversight (QSO) Updates
Life Safety Code Articles
Life Safety Code Frequently Asked Questions (FAQs)
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Page last updated: October 30, 2020
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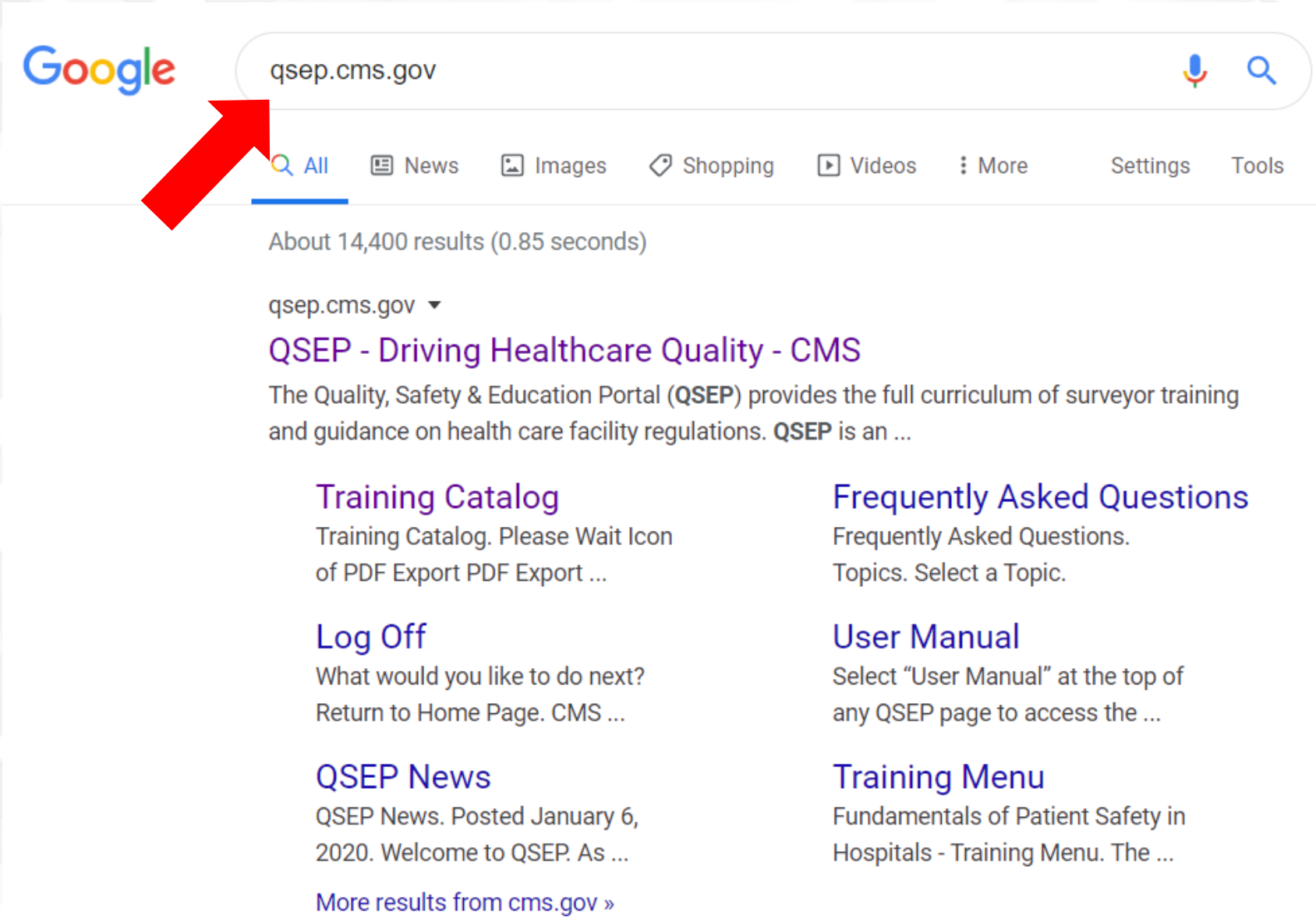
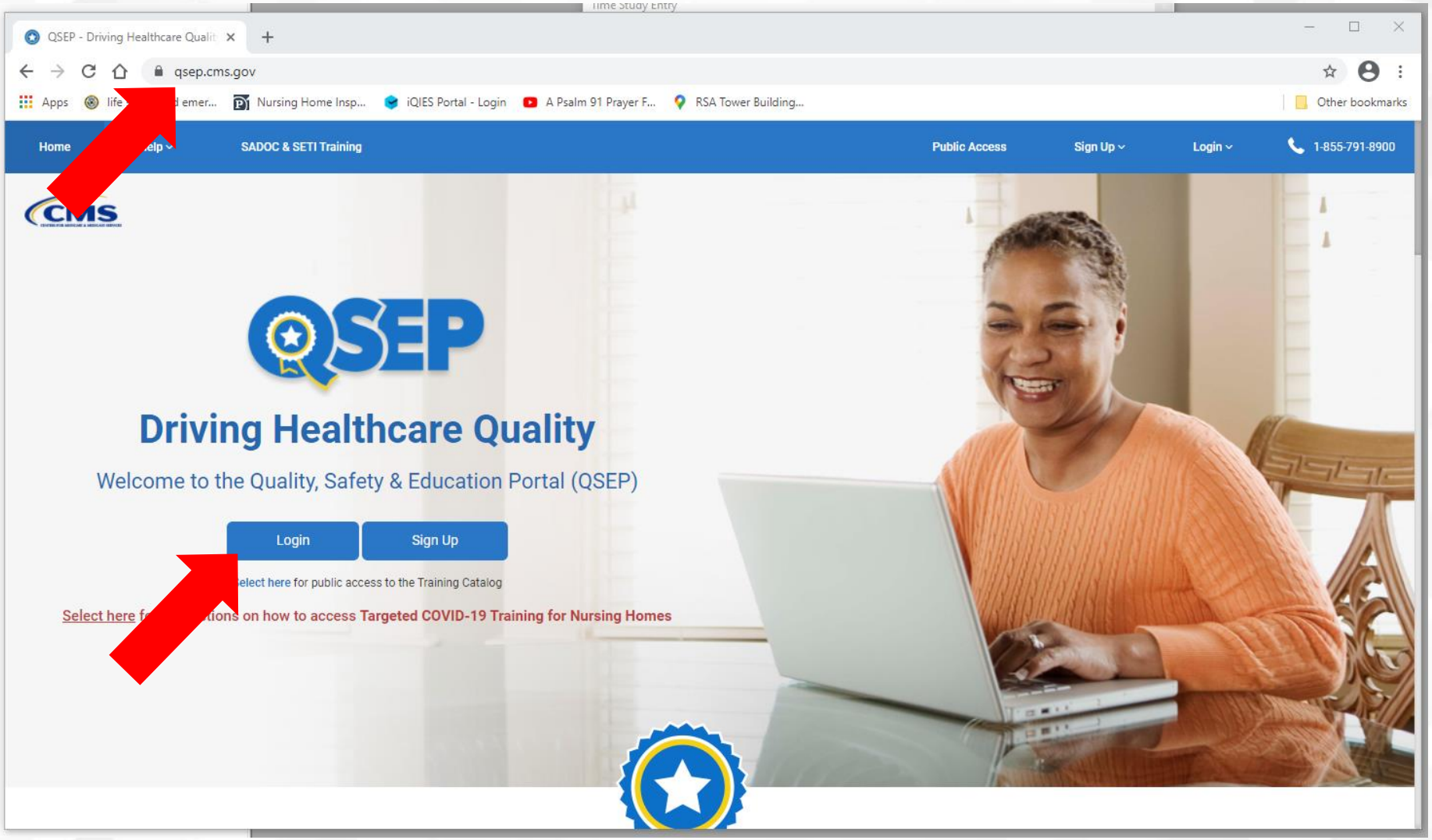
This is CMS' Training website:

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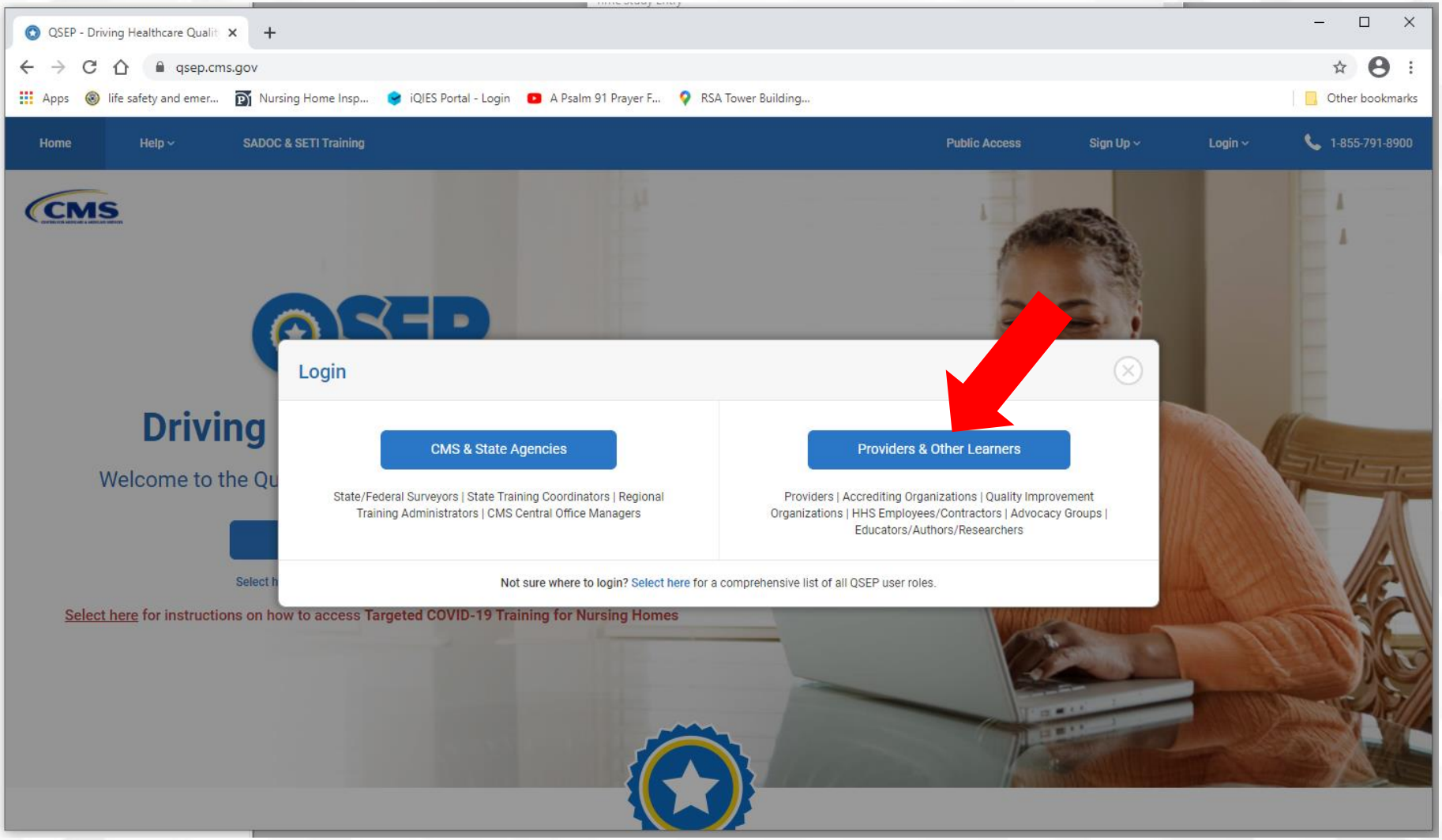
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Providers & Other Learners
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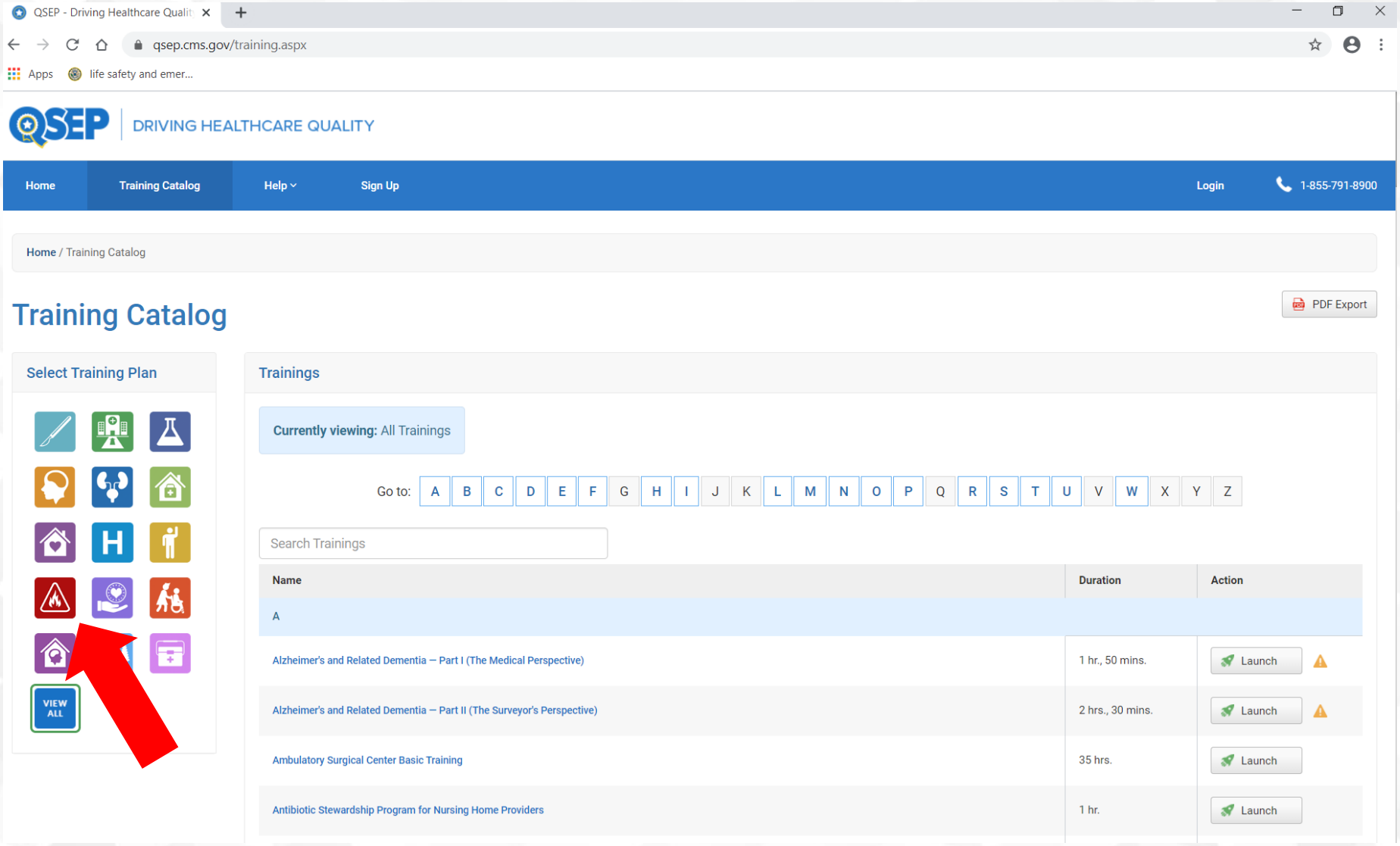
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Name
Duration
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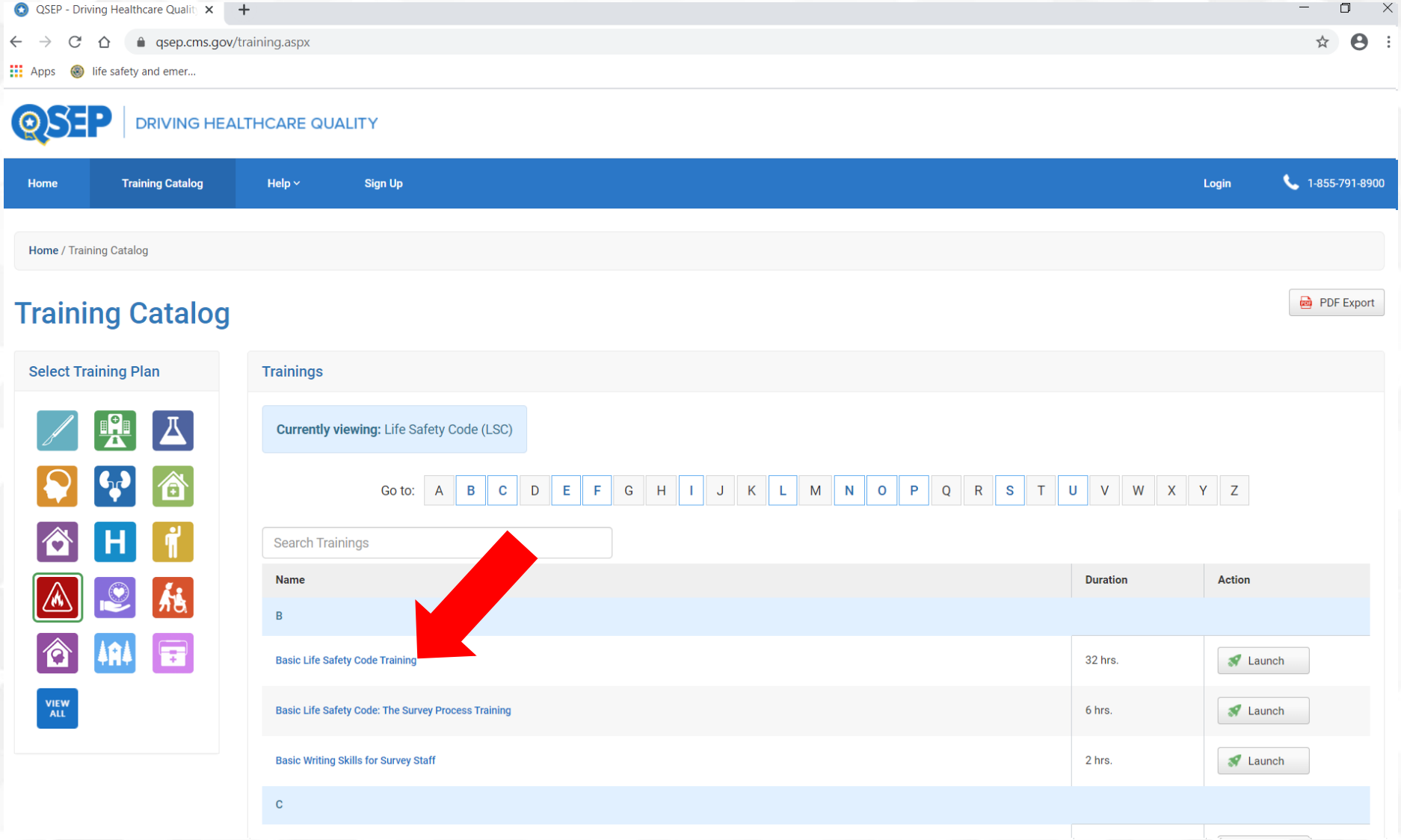
A
Alzheimer's and Related Dementia — Part I (The Medical Perspective)
1 hr., 50 mins.
Launch
Alzheimer's and Related Dementia — Part II (The Surveyor's Perspective)
2 hrs., 30 mins.
Launch
Ambulatory Surgical Center Basic Training
35 hrs.
Launch
Antibiotic Stewardship Program for Nursing Home Providers
1 hr.
Launch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Basic Life Safety Code: The Survey Process Training
6 hrs.
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Basic Writing Skills for Survey Staff
2 hrs.
Launch
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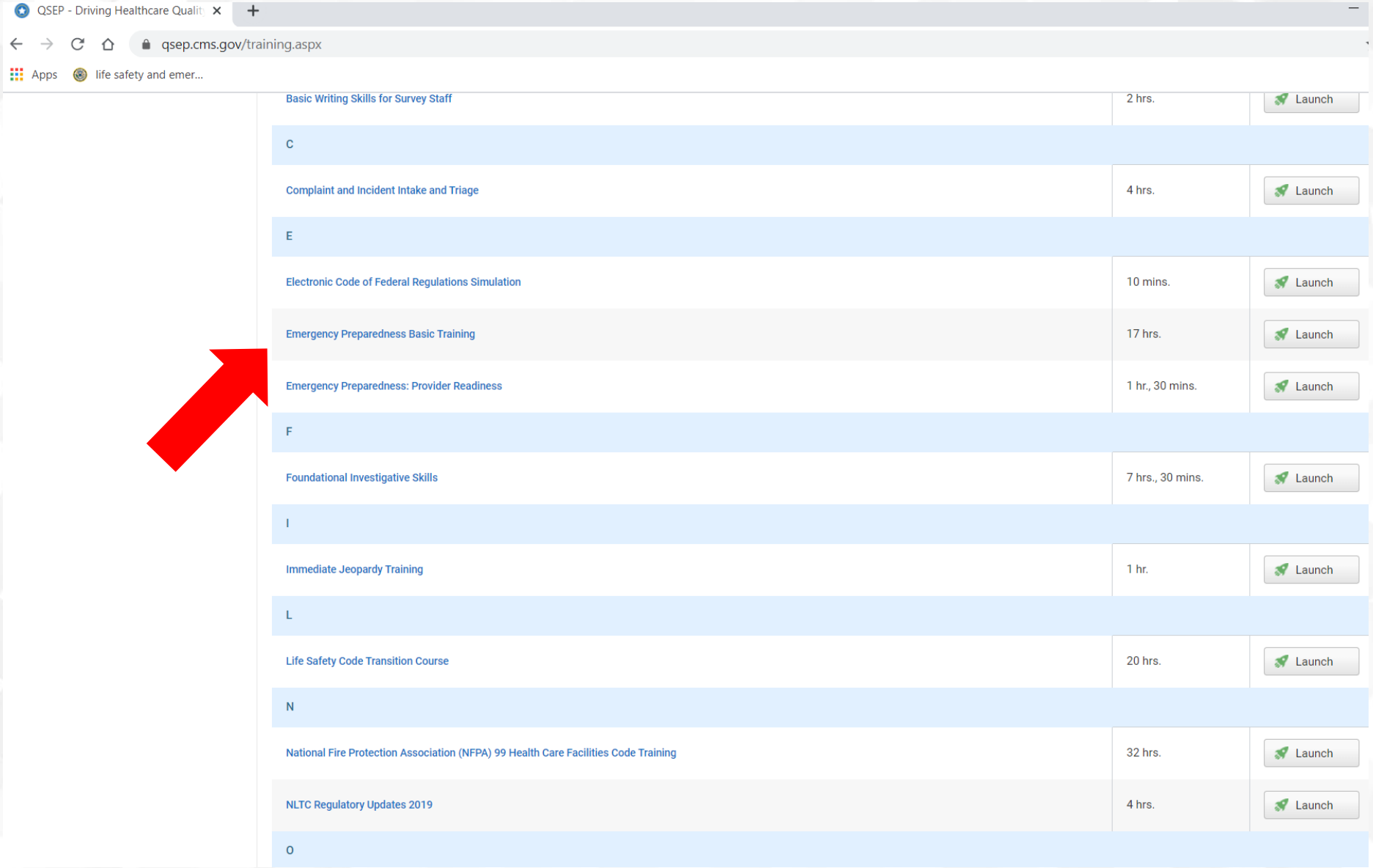
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Complaint and Incident Intake and Triage
4 hrs.
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E
Electronic Code of Federal Regulations Simulation
10 mins.
Launch
Emergency Preparedness Basic Training
17 hrs.
Launch
Emergency Preparedness: Provider Readiness
1 hr., 30 mins.
Launch
F
Foundational Investigative Skills
7 hrs., 30 mins.
Launch
I
Immediate Jeopardy Training
1 hr.
Launch
L
Life Safety Code Transition Course
20 hrs.
Launch
N
National Fire Protection Association (NFPA) 99 Health Care Facilities Code Training
32 hrs.
Launch
NLTC Regulatory Updates 2019
4 hrs.
Launch
O

On documentation, we usually go back 12 months from the date of the survey.

The survey is from the time we enter your building until the time we leave.

No information will be reviewed after we leave your facility.

The following Medicare/Medicaid (M & M) Statement must be on an E Tag, and on a K Tag for each building (if you have more than one building)

"This plan of correction constitutes a written allegation of substantial compliance with Federal Medicare and Medicaid requirements."

The following are some Life Safety K Tags, this does not include all of the Life Safety K Tags.

K293 Exit Signage

What deficiencies we see:

- Directional exit signs not pointing the way to an exit
- Exit signs not continuously illuminated
- Exit sign is in place, but facility has put another sign up stating “Not an Exit”, “Stop No Exit”
- No monthly visual inspection

2012 NFPA 101, 7.10.1.3, 7.10.2.1, and 7.10.5.2.1


EXIT


EXIT
AUTOMATIC
CAUTION
DOOR
AUTOMATIC
CAUTION
DOOR


EXIT
This is NOT an Exit.
Go Through Lobby to Exit.
EXIT
STOP
NO EXIT
This is NOT an Exit.
Go Through Lobby to Exit.
NOT AN EXIT
STOP
NO EXIT

K321 Hazardous Areas

2012 NFPA 101, 19.3.2.1.5 Hazardous areas shall include, but shall not be restricted to, the following:

(1) Boiler and fuel-fired heater rooms
(2) Central/bulk laundries larger than 100 ft2 (9.3 m2)
(3) Paint shops
(4) Repair shops
(5) Rooms with soiled linen in volume exceeding 64 gal (242 L)
(6) Rooms with collected trash in volume exceeding 64 gal (242 L)

K321 Hazardous Areas

(7) Rooms or spaces larger than 50 ft2 (4.6 m2), including repair shops, used for storage of combustible supplies and equipment in quantities deemed hazardous by the authority having jurisdiction

(8) Laboratories employing flammable or combustible materials in quantities less than those that would be considered a severe hazard


TREATMENT RECORD
TREATMENT RECORD
BANKERS BOX

K321 Hazardous Areas

- The walls and ceiling in an hazardous room with automatic sprinkler protection shall restrict the movement of smoke
- Doors shall be self-closing and positive latching
- Cannot prop self-closing doors open

2012 NFPA 101, 19.3.2.1.2, 19.3.2.1.3, and CFR 483.90(a)(1)(ii)

K321 Hazardous Areas

Inspect self-closing devices to make sure all parts are there and working

K324 Cooking Facilities

What deficiencies we see:

- Facility not conducting/documenting monthly inspections of the automatic wet chemical extinguishing system under the kitchen hood

- Not conducting the semiannual kitchen hood exhaust system inspection/cleaning by an outside company

2009 NFPA 17A, 7.2.1 & 7.2.2
2011 NFPA 96, 11.4, Table 11.4 & 11.6

This fire extinguisher tag is for the monthly inspection of the automatic wet chemical extinguishing system under the kitchen hood. See next two slides for what you shall be checking

K324 Cooking Facilities

At a minimum, this monthly "quick check" or inspection shall include verification of the following:

(1) The extinguishing system is in it's proper location
(2) The manual actuators are unobstructed
(3) The tamper indicators and seals are intact
(4) The maintenance tag or certificate is in place
(5) No obvious physical damage or condition exists that might prevent operation
(6) The pressure gauge(s), if provided, shall be inspected physically or electronically to ensure it is in the operable range

2009 NFPA 17A, 7.2.2

K324 Cooking Facilities

(7) The nozzle blowoff caps, where provided, are intact and undamaged

(8) Neither the protected equipment nor the hazard has not been replaced, modified, or relocated

2009 NFPA 17A, 7.2.2

K324 Cooking Facilities

At least semiannually, maintenance shall be conducted (by an outside company on the automatic suppression system for the kitchen hood) in accordance with the manufacturer's listed installation and maintenance manual.

2009 NFPA 17A, 7.3.3

K324 Cooking Facilities

- Grease filters shall be arranged so that all exhaust air passes through the grease filters.
- Grease filters shall be equipped with a grease drip tray beneath their lower edges.
- The addition of obstructions to spray patterns from the cooking appliance nozzle(s) such as baffle plates, shelves, or any modification shall not be permitted.

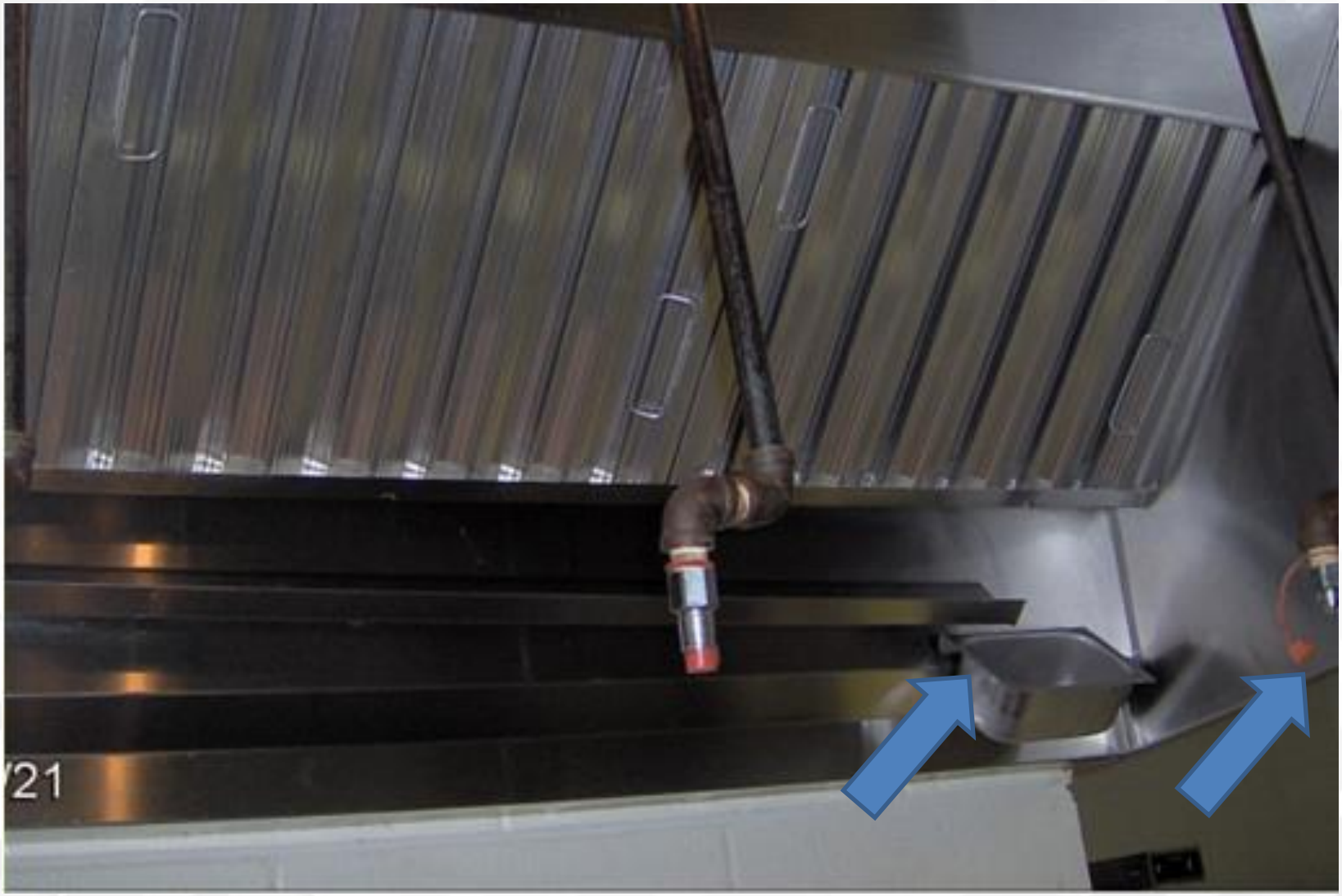
2011 NFPA 96, 6.2.3.3, 6.2.4.1, and 10.2.7.3

The nozzles are directed at the shelf and will not extinguish any fire

Grease filters shall be arranged so that all exhaust air passes through the grease filters. No gaps between filters

These filters were put in going in the wrong direction: horizontally instead of vertically

The grease drip tray metal container was installed wrong and the far right nozzle blowoff cap is not protecting the nozzle



K324 Cooking Facilities

The entire exhaust system shall be inspected for grease buildup by a properly trained, qualified, and certified person (s) acceptable to the authority having jurisdiction and in accordance with Table 11.4, which is semiannually

2011 NFPA 96, 11.4 and Table 11.4

K325 Alcohol-Based Hand Rub Dispensers

2012 NFPA 101, 19.3.2.6

(5) Can have up to 10 gallons in use within a smoke compartment

- One dispenser within a room is not included in this limitation

(7) More than 5 gallons stored in a smoke compartment shall comply with NFPA 30.

Most ABHR solution has a flash point of 63 degrees and would be a Class IB Liquid.

K325 Alcohol-Based Hand Rub Dispensers Locations

LSC 19.3.2.6

(1) In corridors at least 6 feet wide.

(4) At least 48 inches apart - horizontally

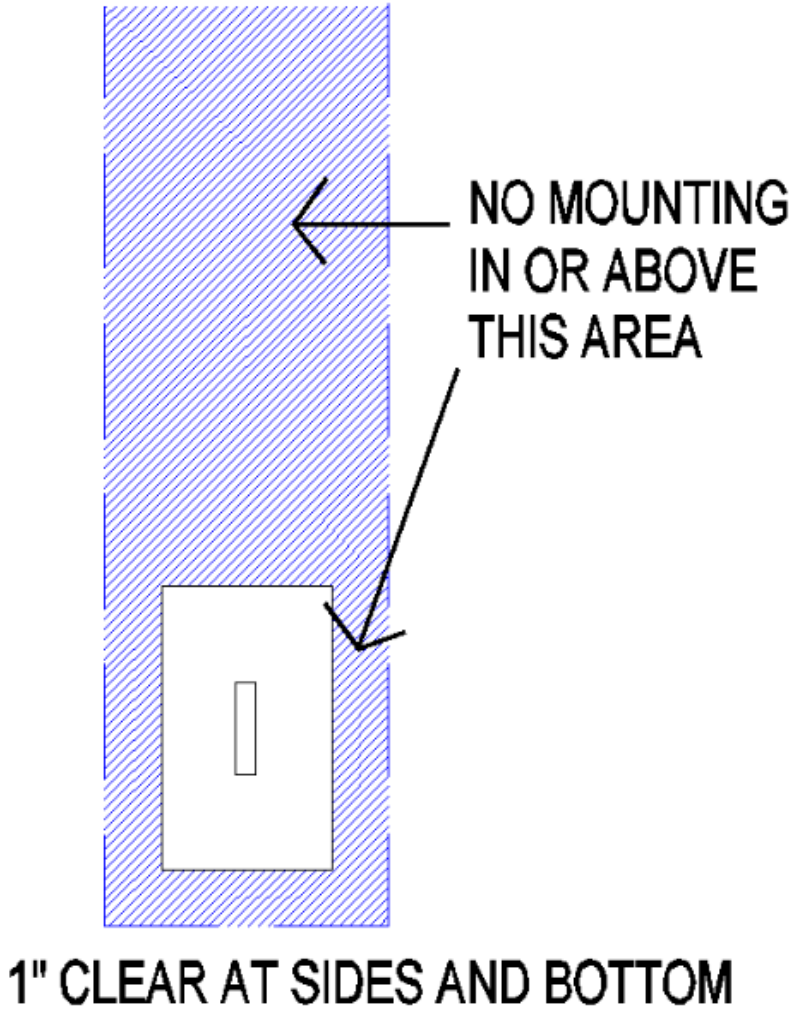
(9) Mounted over carpet only in sprinklered smoke compartments

(8) 1” Horizontally mounting distance from an ignition source, including:

- Light switch
- Electrical receptacle

1” Vertically from bottom

Never above




right
wrong
Purell
Purell
INSTANT HAND SANITIZER

K345 Fire Alarm System Testing & Maintenance

K345 Fire Alarm System Testing & Maintenance

What deficiencies we see:

- No annual inspection conducted within the past 12 months

  2010 NFPA 72, 10.18.3.1, and Table 14.4.5

- More than two visual notification appliances in the corridor in any field of view not flashing in synchronization

  2010 NFPA 72, 18.5.4.4.7


FIRE

K345 Fire Alarm System Testing & Maintenance

What deficiencies we see:

- Magnetic exit doors failed to release under:
  activation of the fire alarm system and/or
  loss of primary power to the fire alarm system
  2010 NFPA 72, 21.9

- No sensitivity test for the smoke detectors conducted within the past 2 years
  2010 NFPA 72, 14.4.5.3.2

K345 Fire Alarm Systems Testing & Maintenance

Magnetic Locking Devices

Full Time

Delayed

Smoke detector sensitivity testing machine

K351 Sprinkler System Installation

- Where quick-response sprinklers are installed, all sprinklers within a compartment shall be quick-response unless otherwise permitted in 8.3.3.3.

- When existing light hazard systems (this would be nursing facilities) are converted to use quick-response or residential sprinklers, all sprinklers in a compartmented space shall be changed.

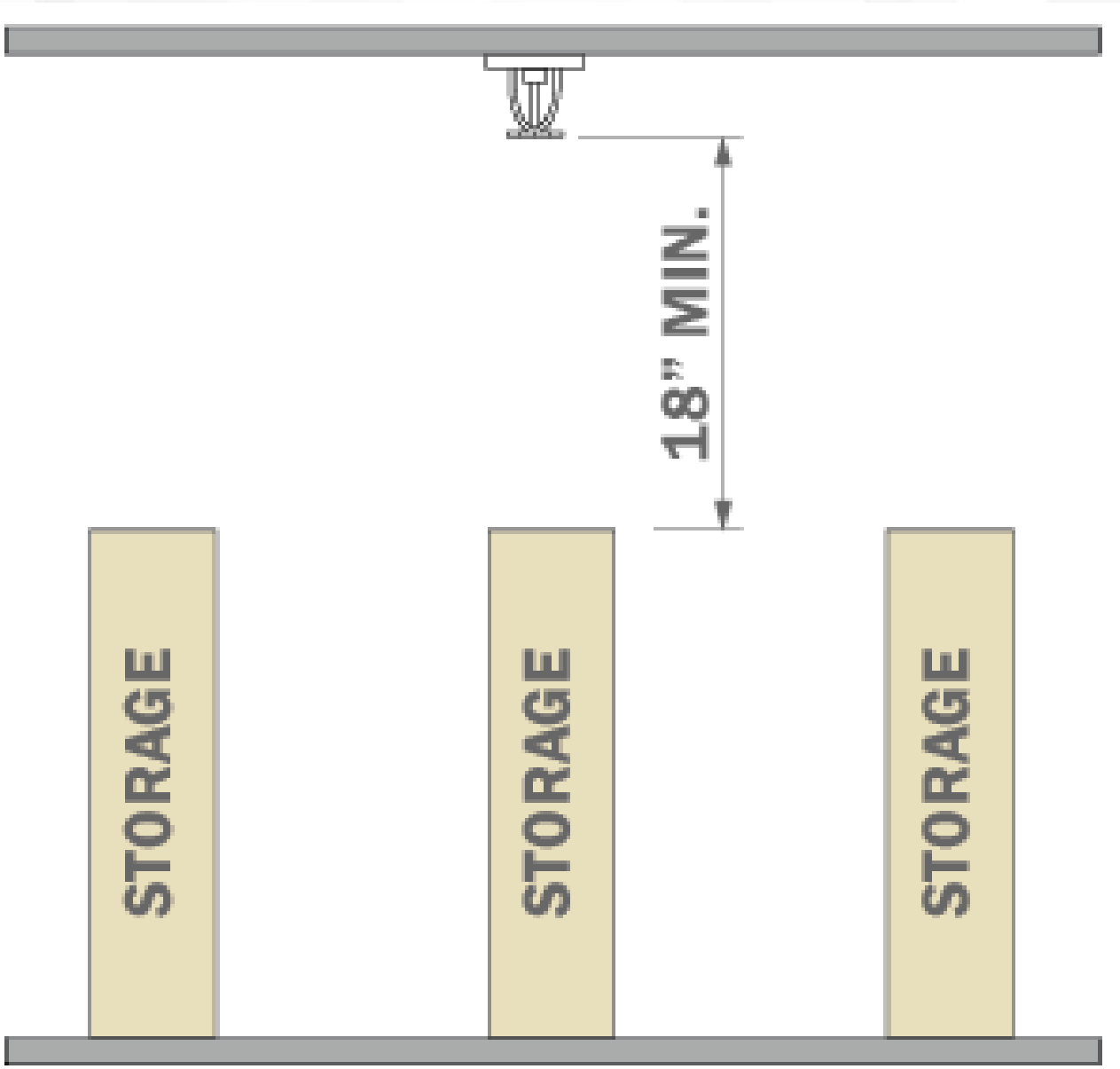
2010 NFPA 13, 8.3.3.2, 8.3.3.3, and 8.3.3.4


Quick Response
Standard Response
3 MM Bulb
5 MM Bulb
Get to Know Your Sprinklers
qrfs.com/blog or tweet @QuickResponseFS

K351 Sprinkler System Installation

- Clearance between the deflector and the top of storage shall be 18” or greater
- Plates, escutcheons, or other devices used to cover the annular space around a sprinkler shall be metallic or shall be listed for use around a sprinkler

2010 NFPA 13, 8.5.6.1, and 6.2.7.1


18" MIN.
STORAGE
STORAGE
STORAGE

Missing escutcheon plates

Escutcheons: Recessed, Flat And Adjustable

K353 Sprinkler Systems – Maintenance and Testing

From 2011 NFPA 25

Table 5.1.1.2 Summary of Sprinkler System Inspection, Testing, and Maintenance

Item	Frequency	Reference
Inspection		
Gauges (dry, preaction, and deluge systems)	Weekly/monthly	5.2.4.2, 5.2.4.3, 5.2.4.4
Control valves		Table 13.1
Waterflow alarm devices	Quarterly	5.2.5
Valve supervisory alarm devices	Quarterly	5.2.5
Supervisory signal devices (except valve supervisory switches)	Quarterly	5.2.5
Gauges (wet pipe systems)	Monthly	5.2.4.1
Hydraulic nameplate	Quarterly	5.2.6
Buildings	Annually (prior to freezing weather)	4.1.1.1
Hanger/seismic bracing	Annually	5.2.3
Pipe and fittings	Annually	5.2.2
Sprinklers	Annually	5.2.1
Spare sprinklers	Annually	5.2.1.4
Information sign	Annually	5.2.6.1
Fire department connections		Table 13.1
Valves (all types)		Table 13.1
Obstruction, internal inspection of piping	5 years	14.2

K353 Sprinkler Systems – Maintenance and Testing

From 2011 NFPA 25

Test		
Waterflow alarm devices		
Mechanical devices	Quarterly	5.3.3.1
Vane and pressure switch type devices	Semiannually	5.3.3.2
Valves supervisory alarm devices		Table 13.1
Supervisory signal devices (except valve supervisory switches)		Table 13.1
Main drain		Table 13.1
Antifreeze solution	Annually	5.3.4
Gauges	5 years	5.3.2
Sprinklers — extra-high temperature	5 years	5.3.1.1.1.4
Sprinklers — fast-response	At 20 years and every 10 years thereafter	5.3.1.1.1.3
Sprinklers	At 50 years and every 10 years thereafter	5.3.1.1.1
Sprinklers	At 75 years and every 5 years thereafter	5.3.1.1.1.5
Sprinklers — dry	At 10 years and every 10 years thereafter	5.3.1.1.1.6
Maintenance		
Valves (all types)		Table 13.1
Low-point drains (dry pipe system)		13.4.4.3.2
Sprinklers and automatic spray nozzles protecting commercial cooking equipment and ventilation systems	Annually	5.4.1.9
Investigation		
Obstruction		14.3

K353 Sprinkler Systems – Maintenance and Testing

- Dry-type sprinkler heads that have been installed for 10 years shall be replaced, or a sampling sent for testing. Retest after next 10 years. New this code adoption.
- Quick Response sprinkler heads that have been installed for 20 years shall be replaced, or a sampling sent for testing. Retest after next 10 years. Was exception #2 under 2-3.1.1 in 2000 edition.

2011 NFPA 25, 5.3.1.1.1.6, and 5.3.1.1.1.3

K353 Sprinkler Systems – Maintenance and Testing

- Standard Response sprinkler heads that have been installed for 50 years shall be replaced, or a sampling sent for testing. Retest after next 10 years.

- The sample needed for testing per individual sprinkler sample (type) - not less than four sprinklers or 1%, whichever is greater

2011 NFPA 25, 5.3.1.1.1, and 5.3.1.2

K353 Sprinkler System – Maintenance and Testing

Have all documentation ready for the Life Safety Surveyor.

K355 Portable Fire Extinguishers

- Fire extinguishers shall be subjected to maintenance at intervals of not more than 1 year by an outside company
- Fire extinguishers shall be inspected at a minimum of 30-day intervals by facility staff
- Fire extinguishers having a gross weight not exceeding 40 lb. shall be installed so the top of the fire extinguisher is not more than 5 ft above the floor
- In no case shall the clearance between the bottom of the hand portable fire extinguisher and the floor be less than 4 in

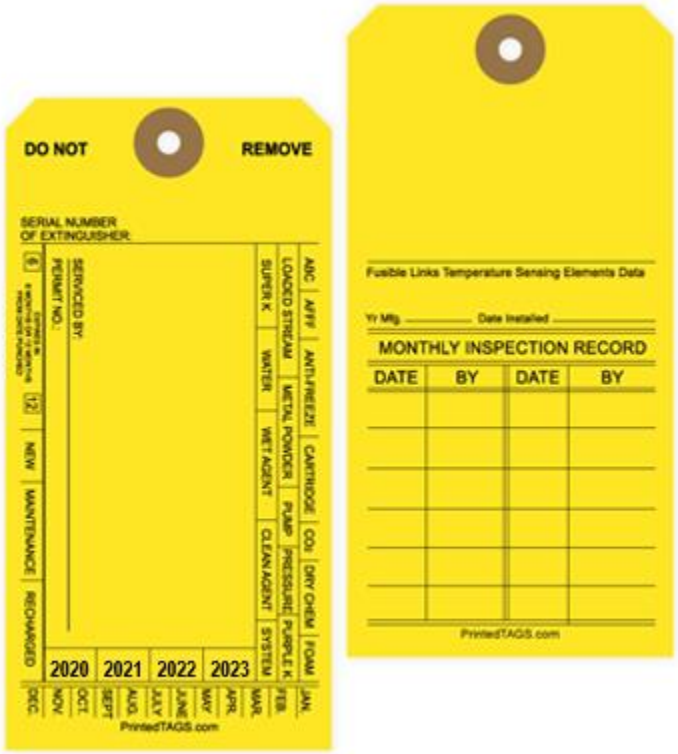
2010 NFPA 10, 7.3.1.1.1, 7.2.1.2, 6.1.3.8.1, and 6.1.3.8.3

K355 Portable Fire Extinguishers

Monthly inspections shall include a check of at least the following items:

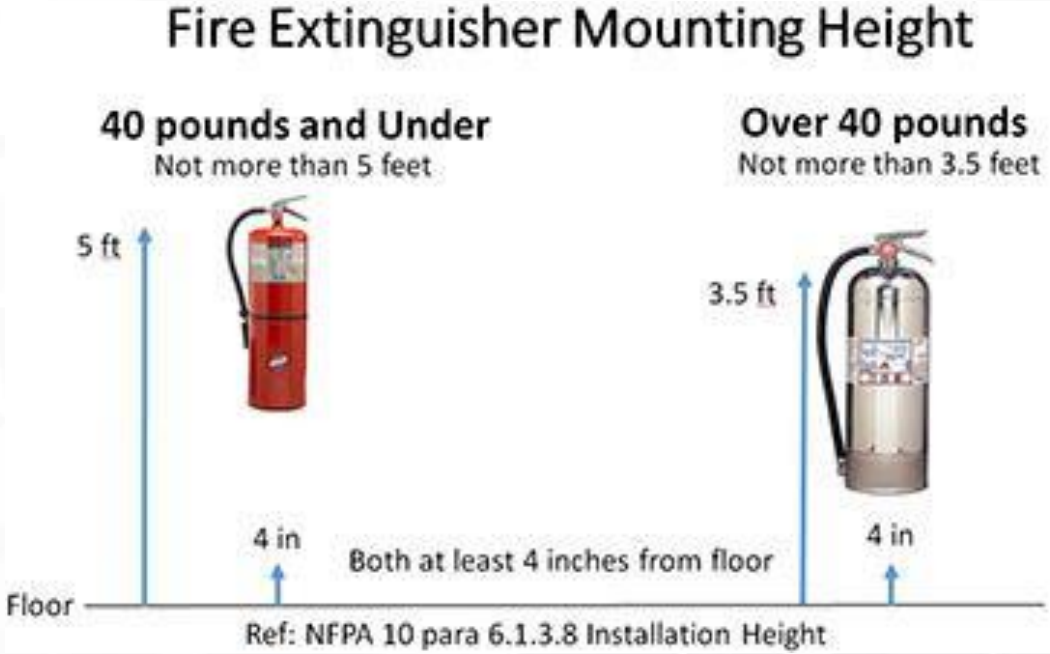
- Location in designated space
- No obstruction to access or visibility
- Pressure gauge reading or indicator in the operable range or position
- Fullness determined by weighing or hefting
- Condition of hose and nozzle

2010 NFPA 10, 7.2.2



This side Contains Monthly Information

This side Contains Annual Information



The top of this fire extinguisher is above the maximum 5’-0” from the finished floor allowed by code

The “K” extinguisher in the kitchen shall have this sign conspicuously placed near the extinguisher

K363 Corridor Doors

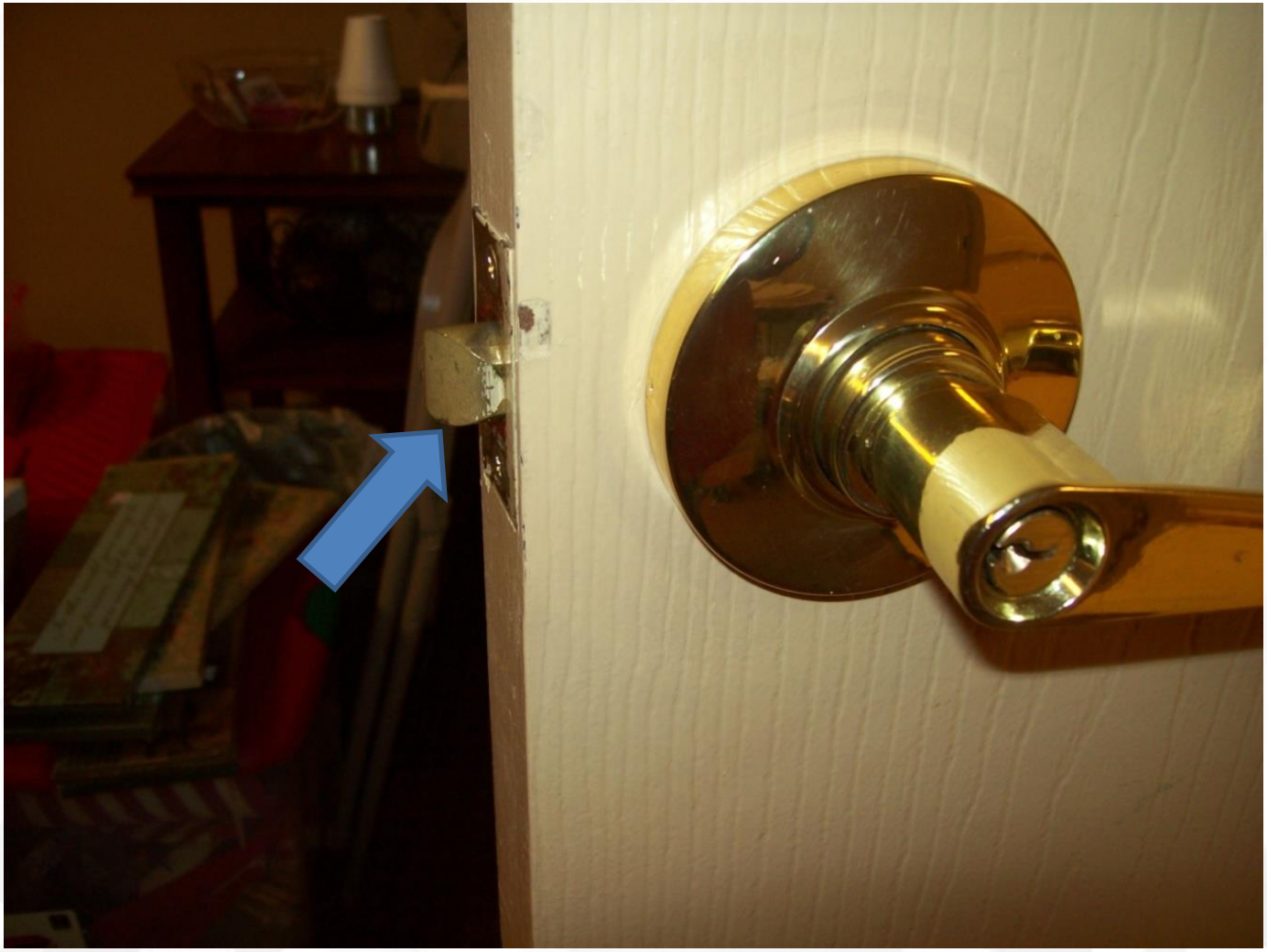
- Shall resist the passage of smoke
- No impediment to closing
- Must be provided with positive latching hardware

2012 NFPA 101, 19.3.6.3.1, 19.3.6.3.10, CFR 482.41 (b) (ii)

K363 Corridor Doors

CFR 482.41 (b) (ii)

Positive Latching Hardware Must be Provided



Positive Latching Hardware Must be Working

K363 Corridor Doors

The gap between the face of the door and the door stop does not exceed ½” in a smoke compartment that is fully sprinklered

S&C-07-18

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-12-25
Baltimore, Maryland 21244-1850

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

Center for Medicaid and State Operations/Survey and Certification Group

Ref: S&C-07-18

DATE: **April 20, 2007**

TO: State Survey Agency Directors
State Fire Authorities

FROM: Director
Survey and Certification Group

SUBJECT: **Multiple Providers** - Hospitals, Ambulatory Surgical Centers, Nursing Homes, Religious Non-Medical Health Care Institutions, Programs of All-Inclusive Care for the Elderly (PACE) Facilities, Critical Access Hospitals, Intermediate Care Facilities for the Mentally Retarded – Permitted Gaps in Corridor Doors and Doors in Smoke Barriers

Memorandum Summary

- In a smoke compartment that is **not fully sprinklered**, a gap between the face of a corridor door and the door stop should not exceed ¼**-inch**, provided that the door latch mechanism is functioning.
- In a smoke compartment that is **fully sprinklered**, a gap between the face of a corridor door and the door stop should not exceed ½**-inch**, provided that the door latch mechanism is functioning.

K363 Corridor Doors

Smoke Resistance

Doors and frames protecting corridor openings shall be constructed to resist the passage of smoke.

Binding on Frame

Gaps to Frame

K363 Corridor Doors

2012 NFPA 101, 19.3.6.3.10

Doors shall not be held open by devices other than those that release when the door is pushed or pulled.

Appendix:
Doors should not be blocked open by furniture, door stops, chocks, tie-backs, drop-down or plunger-type devices, or other devices that necessitate manual unlatching or releasing action to close.

K372 Subdivision of Building Spaces – Smoke Barrier Construction

Shall have a minimum ½-hour fire resistance rating and shall restrict the movement of smoke.

Almost all of the smoke barriers in LTC facilities are one hour fire rated and must be maintained as such.

2012 NFPA 101, 19.3.7.3, and 8.5

K372 Subdivision of Building Spaces – Smoke Barrier Construction

- Seal any and all penetrations
- Use the correct Brand and Product to seal any penetrations. Keep container, even if it is empty for product information
- Use product per manufacturer's recommendations
- No orange or yellow foam (without documentation on the fire rating of the product)

K521 HVAC

Each damper shall be tested and inspected one year after installation. The test and inspection frequency shall then be every 4 years. Know if you have dampers and where they are located.

Each damper shall be provided with access for inspection and service of the damper's working parts.

2010 NFPA 105, 6.5.2, & 6
2010 NFPA 80, 19.4.1, 19.4.1.1, & 19.2.3

K524 Indoor Gas Fireplaces

LSC 19.5.2.3(2) Expanded requirements

- Direct-vent type, per NFPA 54
- May be within smoke compartment with sleeping rooms if sprinklered with quick-response or residential sprinklers
- Not within a sleeping room
- Locked or restricted gas controls
- Wire mesh screen and sealed glass front
- Electrically supervised (connected to the fire alarm system) carbon monoxide detection in the space

K524 Carbon Monoxide (CO) Detection

2012 NFPA 101, 19.5.2 Heating, Ventilating, and Air-Conditioning.

19.5.2.3

(2) Direct-vent gas fireplaces, as defined in NFPA 54, National Fuel Gas Code, shall be permitted inside of smoke compartments containing patient sleeping areas, provided that all of the following criteria are met:

(f) Electrically supervised carbon monoxide detection in accordance with Section 9.8 shall be provided in the room where the fireplace is located.

K524 Carbon Monoxide (CO) Detection

2012 NFPA 101, 9.8 Carbon Monoxide (CO) Detection and Warning Equipment.

Where required by another section of this Code, carbon monoxide (CO) detection and warning equipment shall be provided in accordance with NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment.

K524 Carbon Monoxide (CO) Detection

2010 NFPA 72, Table 14.4.2.2 Test Methods

The devices shall be tested in place to ensure CO entry to the sensing chamber by introduction of CO gas from the protected area, through the vents, to the sensing chamber.

2010 NFPA 72, Table 14.4.5 Testing Frequencies

The devices shall be tested annually.

K711 Evacuation and Relocation Plan

19.7.1 Evacuation and Relocation Plan and Fire Drills.

19.7.1.1 The administration of every health care occupancy shall have, in effect and available to all supervisory personnel, written copies of a plan for the protection of all persons in the event of fire, for their evacuation to areas of refuge, and for their evacuation from the building when necessary.

19.7.1.2 All employees shall be periodically instructed and kept informed with respect to their duties under the plan required by 19.7.1.1.

19.7.1.3 A copy of the plan required by 19.7.1.1 shall be readily available at all times in the telephone operator's location or at the security center.

2012 NFPA 101,

K711 Evacuation and Relocation Plan

19.7.2.1* Protection of Patients.

19.7.2.1.1 For health care occupancies, the proper protection of patients shall require the prompt and effective response of health care personnel.

19.7.2.1.2 The basic response required of staff shall include the following:

(1) Removal of all occupants directly involved with the fire emergency
(2) Transmission of an appropriate fire alarm signal to warn other building occupants and summon staff
(3) Confinement of the effects of the fire by closing doors to isolate the fire area
(4) Relocation of patients as detailed in the health care occupancy's fire safety plan

2012 NFPA 101,

K711 Evacuation and Relocation Plan

A written health care occupancy fire safety plan shall provide for all of the following:

(1) Use of alarms
(2) Transmission of alarms to fire department
(3) Emergency phone call to fire department (New 2012)
(4) Response to alarms
(5) Isolation of fire
(6) Evacuation of immediate area
(7) Evacuation of smoke compartment
(8) **Preparation of floors and building for evacuation (clearing corridors)**
(9) Extinguishment of fire

2012 NFPA 101, 19.7.2.2

K711 Evacuation and Relocation Plan

Any required aisle, corridor, or ramp shall be not less than 48 in. in clear width where serving as means of egress from patient sleeping rooms, unless otherwise permitted by one of the following:

(2) Where corridor width is at least 6 ft, noncontinuous projections not more than 6 in. from the corridor wall, above the handrail height, shall be permitted. **Per ADA not more than 4 in**.

(4) Projections into the required width shall be permitted for wheeled equipment, provided that **all** of the following conditions are met:

2012 NFPA 101, 19.7.2.2 (8), and 19.2.3.4 (2), (4)

K711 Evacuation and Relocation Plan

(a) The wheeled equipment does not reduce the clear unobstructed corridor width to less than 60 in

(b) The health care occupancy **fire safety plan and training program address the relocation of the wheeled equipment during a fire or similar emergency**.

(c) The wheeled equipment is limited to the following:

i. Equipment in use and carts in use
ii. Medical emergency equipment not in use
iii. Patient lift and transport equipment

2012 NFPA 101, 19.7.2.2 (8), and 19.2.3.4 (2), (4)

K712 Fire Drills

19.7.1.4* Fire drills in health care occupancies shall include the transmission of a fire alarm signal and simulation of emergency fire conditions.

19.7.1.5 Infirm or bedridden patients shall not be required to be moved during drills to safe areas or to the exterior of the building.

19.7.1.6 Drills shall be conducted quarterly on each shift to familiarize facility personnel (nurses, interns, maintenance engineers, and administrative staff) with the signals and emergency action required under varied conditions.

19.7.1.7 When drills are conducted between 9:00 p.m. and 6:00 a.m. (2100 hours and 0600 hours), a coded announcement shall be permitted to be used instead of audible alarms.

19.7.1.8 Employees of health care occupancies shall be instructed in life safety procedures and devices.

2012 NFPA 101,

K712 Fire Drills

4.7.2* Drill Frequency. Emergency egress and relocation drills, where required by Chapters 11 through 43 or the authority having jurisdiction, shall be held with sufficient frequency to familiarize occupants with the drill procedure and to establish conduct of the drill as a matter of routine. Drills shall include suitable procedures to ensure that all persons subject to the drill participate.

4.7.3 Orderly Evacuation. When conducting drills, emphasis shall be placed on orderly evacuation rather than on speed.

4.7.6* A written record of each drill shall be completed by the person responsible for conducting the drill and maintained in an approved manner.

2012 NFPA 101,

K712 Fire Drills

- "Drills **shall** be held at expected and **unexpected times and under varying conditions** to simulate the unusual conditions that can occur in an actual emergency"
- "If the drill is always held in the same way at the same time, it loses much of it's value."
- Drills should be held at varying times.

2012 NFPA 101, 19.1.1.1.3, 4.7.4

K712 Fire Drills

- "Quarterly on each shift" – includes weekends (Baylor Shifts)
- "Familiarize facility personnel (nurses, interns, maintenance engineers, and administrative staff) with the signals and emergency action required under varied conditions" – arrange for all employees to participate, all employees that are on the clock shall sign a participation sheet

2012 NFPA 101, 19.7.1

The state of Alabama recommends using a document like below to plan out your fire drills for the year

FIRE DRILL LOG

Quarters	First Shift	Second Shift	Third Shift
1 Jan – Feb - Mar	Date: Time:	Date: Time:	Date: Time:
2 Apr – May - June	Date: Time:	Date: Time:	Date: Time:
3 Jul – Aug - Sept	Date: Time:	Date: Time:	Date: Time:
4 Oct – Nov - Dec	Date: Time:	Date: Time:	Date: Time:

Reporting of Fires to ADPH

- Nursing home rules – within 24 hours
- Go to alabamapublichealth.gov , click on the “A to Z Index” in the top left corner, click on “L”, click on “Life Safety Code”, under “Resources” click on “Online Reporting of Fires and Similar Incidents”

- Report Fire Watches to this email: lifesafety@adph.state.al.us

K761 Maintenance, Inspection & Testing - Doors

- Implementation was January 1, 2018
- 45 Minute Fire Rated or higher
- Online course for in house inspector – Not Required

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop C2-21-16
Baltimore, Maryland 21244-1850

CENTERS FOR MEDICARE & MEDICAID SERVICES

Center for Clinical Standards and Quality/Survey & Certification Group

Ref: S&C 17-38-LSC

DATE: **July 28, 2017**

TO: State Survey Agency Directors

FROM: Director
Survey and Certification Group

SUBJECT: Fire and Smoke Door Annual Testing Requirements in Health Care Occupancies

Memorandum Summary

- In health care occupancies, fire door assemblies are required to be annually inspected and tested in accordance with the 2010 National Fire Protection Association (NFPA) 80.
- In health care occupancies, non-rated doors assemblies including corridor doors to patient care rooms and smoke barrier doors are not subject to the annual inspection and testing requirements of either NFPA 80 or NFPA 105.
- Non-rated doors should be routinely inspected as part of the facility maintenance program.
- Full compliance with the annual fire door assembly inspection and testing in accordance with 2010 NFPA 80 is required by January 1, 2018.
- Life Safety Code (LSC) deficiencies associated with the annual inspection and testing of fire doors should be cited under K211 – *Means of Egress - General.*

Background

The Centers for Medicare & Medicaid Services (CMS) adopted the 2012 edition of the NFPA LSC, which includes requirements for the maintenance, inspection, and testing of fire doors and smoke doors in certain certified health care facilities.

The 2012 LSC added new provisions under Section 7.2.1.15 – *Inspection of Door Openings* for the annual inspection and testing of certain fire doors and smoke doors assemblies in accordance with the 2010 editions of NFPA 80 – *Standard for Fire Doors and Other Opening Protectives*, and NFPA 105 – *Standard for Smoke Door Assemblies and Other Opening Protectives.*

The new LSC provisions under sections 7.2.1.15.1 and 7.2.1.15.2 require certain fire door and smoke door assemblies to be inspected and tested annually in accordance with the NFPA 80 and NFPA 105. However, section 7.2.1.15.1 states that these requirements only apply where required by Chapters 11 through 43. Therefore, as the LSC health care occupancy chapters (i.e., Chapters 18, 19, 20, 21) do not directly reference section 7.2.1.15, these new annual inspection and testing requirement do not apply to health care occupancies.

K761 Maintenance, Inspection & Testing - Doors

Fire doors assemblies are inspected and tested annually in accordance with NFPA 80, Standard for Fire Doors and Other Opening Protectives.

Individuals performing the door inspections and testing possess knowledge, training or experience that demonstrates ability.

Written records of inspection and testing are maintained and are available for review.

Per survey book: 2012 101, 19.7.6, 8.3.3.1, and 4.6.12
2010 NFPA 80, 5.2, and 5.2.3

K914 Electrical Systems – Maintenance and Testing

Receptacles **not** listed as hospital-grade, at patient bed locations and in locations where deep sedation or general anesthesia is administered, shall be tested at intervals not exceeding 12 months.

(1) The physical integrity of each receptacle shall be confirmed by visual inspection.

2012 NFPA 99, 6.3.4.1.3, 6.3.3.2.1, 6.3.3.2.2, 6.3.3.2.3, and 6.3.3.2.4

K914 Electrical Systems – Maintenance and Testing

(2) The continuity of the grounding circuit in each electrical receptacle shall be verified.

(3) Correct polarity of the hot and neutral connections in each electrical receptacle shall be confirmed.

(4) The retention force of the grounding blade of each electrical receptacle (except locking-type receptacles) shall be not less than 115 g (4 oz).

2012 NFPA 99, 6.3.4.1.3, 6.3.3.2.1, 6.3.3.2.2, 6.3.3.2.3, and 6.3.3.2.4

Use a device like this to check items 2 – 4 on previous slide

K918 Diesel Generators

2010 NFPA 110

8.3.8 A fuel quality test shall be performed at least annually using tests approved by ASTM standards.

POWER PRO-TECH SERVICES

Fuel Analysis Report

North America: +1-800-437-4474

PASS ☑

Account Information	Component Information	Sample Information
Account Numbe	Unit ID: 56526 DF	Tracking Number: 00006272307
Company Name	Eng. Serial#: RG6090L071130	Lab Number: I-237748
Contact:	Fuel Type: DIESEL FUEL	Lab Location: Indianapolis
Address.	Manufacturer: JOHN DEERE	Data Analyst: RAM
	Model: 6090	Sampled: 18-Jul-2017
Phone Number:	Application: POWER GENERATION	Received: 21-Jul-2017
	Tank Capacity:	Completed: 28-Jul-2017
Filter Information	**Miscellaneous Information**	
Filter Change: No	Gen Spec/KW: 2274435	
Filter Type: FULLFLOW	Eqp Mfr/Mdl: KOHLER 275REOZJE	
Micron Rating: 0	Asset Loc.: 22036	
	Work Order #: 576335	

Comments: TEST RESULTS are within NORMAL PARAMETERS for this product. Your note was taken into consideration.

Test Results

Test Method	Test Name	Result	Min	Max
ASTM D7220	Sulfur (ppm)	11.9		
ASTM D2709	Water and Sediment (%)	0		
ASTM D6304C	Water by Karl Fischer (%)			
ASTM D6304C	Water by Karl Fischer (ppm)			
Manufacturer	Aerobic Bacteria (Counts)			
Manufacturer	Bacteria (Counts)	0		
Manufacturer	Fungi (Counts)	Negative		
Manufacturer	Mold (Counts)	0		
mod. ASTM D6468	Thermal Stablity (%)			
mod. ASTM D445	Viscosity 40°C (cSt)	2.53		
mod. ASTM D445	Viscosity 100 °C (cSt)			
mod. ASTM D664	Acid Number (mg KOH/g)			
ASTM D7689	Cloud Point (°C)	-12		
ASTM D7346	Pour Point (°C)	-24		
ASTM D6371	Cold Filter Plug Point (°C)			
ASTM D3828	Closed Cup Flash Point (°C)	63		
ASTM D86	Distillation Initial Boiling Point (°C)	169.4		
ASTM D86	Distillation 10% Recovered (°C)	203.7		
ASTM D86	Distillation 50% Recovered (°C)	262.9		
ASTM D86	Distillation 90% Recovered (°C)	327.8		
ASTM D867	Distillation Final Boiling Point (°C)	356.8		
ASTM D976	Cetane Index	48.8		
ASTM D4052	API Gravity	36.5		
ASTM D4052	Density (g/mL)			
ASTM D4052	Specific Gravity			
ASTM D4868	BTU Per Gallon (BTU/gal)			
ASTM D4868	BTU Per Pound (BTU/lb)			
ASTM D6079	Lubricity (µm)			
ASTM D130	Copper Corrosion	1A		
ASTM D482	Ash Content (mass %)			
ASTM D189	Carbon Residue (%)			
ASTM D7371	% Biodiesel - FAME (%)			

Elemental Analysis mod. ASTM D5185	Result	Min	Max
Iron (ppm)			
Chromium (ppm)			
Nickel (ppm)			
Aluminum (ppm)			
Copper (ppm)			
Lead (ppm)			
Tin (ppm)			
Cadmium (ppm)			
Silver (ppm)			
Vanadium (ppm)			
Silicon (ppm)			
Sodium (ppm)			
Potassium (ppm)			
Titanium (ppm)			
Molybdenum (ppm)			
Antimony (ppm)			
Manganese (ppm)			
Lithium (ppm)			
Boron (ppm)			
Magnesium (ppm)			
Calcium (ppm)			
Barium (ppm)			
Phosphorus (ppm)			
Zinc (ppm)			

Particle Count (particles/mL) ISO 4406 & mod. ISO 11500	Result	Min	Max
ISO Cleanliness Code	/ /	/ /	/ /
> 4µm			
> 6µm			
> 10µm			
> 14µm			
> 21µm			
> 38µm			
> 70µm			
> 100µm			

	Result	Min	Max
Appearance	CLEAR		

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied.

Step 1 K918

K918 Diesel Generators

2010 NFPA 110

8.4.2 Diesel generator sets in service shall be exercised at least once monthly, for a minimum of 30 minutes, using one of the following methods:

(1) Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer

(2) Under operating temperature conditions and at not less than 30 percent of the EPS nameplate kW rating

K918 Diesel Generators

2010 NFPA 110

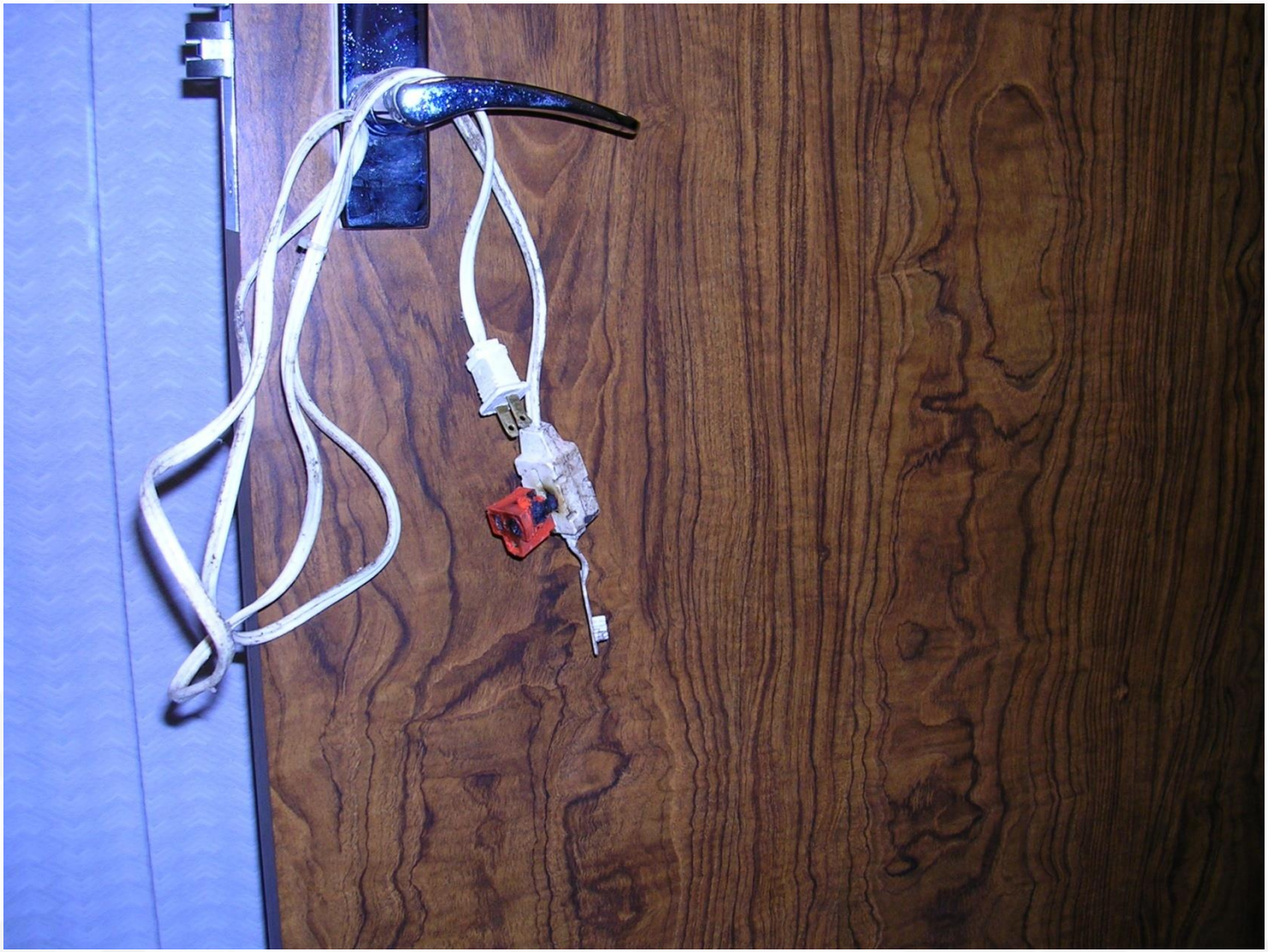
8.4.2.3 Diesel-powered EPS installations **that do not meet the requirements of 8.4.2** shall be exercised monthly with the available EPSS load and shall be exercised annually with supplemental loads at **not less than 50 percent of the EPS nameplate kW rating for 30 continuous minutes and at not less than 75 percent of the EPS nameplate kW rating for 1 continuous hour** for a total test duration of not less than 1.5 continuous hours.

K920 Extension Cords

Extension cords are for temporary uses only and shall not be used as a substitute for fixed wiring.

All States Letter 22-99
2011 NFPA 70, 400.8(1)

K920 Extension Cords and Adapters



K920 Power Strips

In Resident Rooms Patient Care Related Electrical Equipment (PCREE) should be plugged into a wall outlet, but under unreasonable hardships CMS is allowing facilities to use Special Purpose Power Taps (SPRPT) listed as UL 1363A or 60601-1.

S&C Letter: 14-46-LSC
2012 NFPA 99 *(Health Care Facilities Code),* 10.2.3.6, and 10.2.4

K920 Power Strips

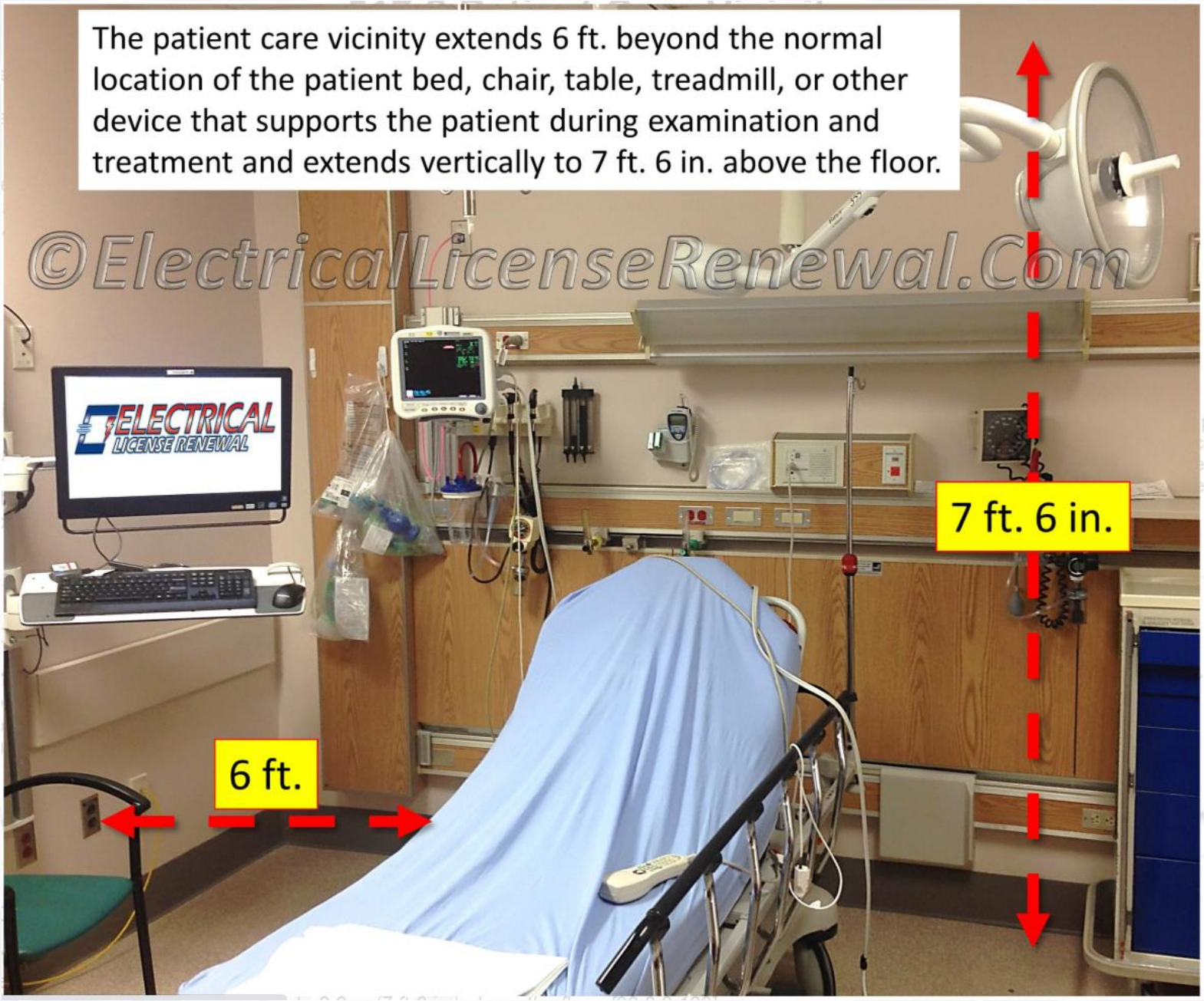
S&C: 14-46-LSC

- The increasing need for electrical equipment in health care facilities has resulted in a need for more electrical receptacles in areas where patients receive examination and treatment.
- In addition, the exception no longer requires a power strip to be an integral component of a manufacturer tested equipment assembly.

K920 Power Strips

S&C: 14-46-LSC

- "Patient-care-related electrical equipment" is defined in section 3.3.137 as electrical equipment that is intended to be used for diagnostic, therapeutic, or monitoring purposes in the patient care vicinity.
- Power strips may ***not*** be used in a patient care vicinity to power non-patient care-related electrical equipment (e.g. personal electronics).


The patient care vicinity extends 6 ft. beyond the normal location of the patient bed, chair, table, treadmill, or other device that supports the patient during examination and treatment and extends vertically to 7 ft. 6 in. above the floor.
©ElectricalLicenseRenewal.Com
ELECTRICAL LICENSE RENEWAL
7 ft. 6 in.
6 ft.

K920 Power Strips

S&C: 14-46-LSC

- Power strips providing power to patient care-related electrical equipment **must be** Special-purpose Relocatable Power Taps (SPRPT) listed as UL 1363A or 60601-1.
- Power strips providing power to non-patient care-related electrical equipment **must be** Relocatable Power Taps (RPT) listed as UL 1363.
- **These two are not interchangeable**

K920 Power Strips

In Resident Rooms power strips **may** be used outside of the of the patient care vicinity for non-patient-care-related electrical equipment (such as personal electronics).

S&C Letter: 14-46-LSC
2012 NFPA 99, 10.2.3.6, and 10.2.4

K920 Power Cords & Extensions

- Cannot mix PCREE and nonPCREE on the same power strip
- No “daisy chaining”

S&C Letter: 14-46-LSC
2012 NFPA 99, 10.2.3.6, and 10.2.4

K921 Patient Care Related Electrical Equipment (PCREE) Testing and Maintenance

The facility shall contract with an outside company

OR

The facility shall establish policies and protocols for the type of test and intervals of testing for patient care–related electrical equipment for in house testing maintenance.

2012 NFPA 99, 10.5.2.1.1

K921 PCREE – Testing and Maintenance

The manufacturer of the appliance shall furnish documents containing at least a technical description, instructions for use, and a means of contacting the manufacturer.

The documents specified in 10.5.3.1 shall include the following, where applicable:

(1) Illustrations that show the location of controls
(2) Explanation of the function of each control
(3) Illustrations of proper connection to the patient or other equipment, or both

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

K921 PCREE – Testing and Maintenance

(4) **Step-by-step procedures for testing and proper use of the appliance**

(5) Safety considerations in use and servicing of the appliance

(6) Precautions to be taken if the appliance is used on a patient simultaneously with other electric appliances

(7) Schematics, wiring diagrams, mechanical layouts, parts lists, and other pertinent data for the appliance

(8) Instructions for cleaning, disinfection, or sterilization

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

K921 PCREE – Testing and Maintenance

(9) Utility supply requirements (electrical, gas, ventilation, heating, cooling, and so forth)
(10) Explanation of figures, symbols, and abbreviations on the appliance
(11) Technical performance specifications
(12) Instructions for unpacking, inspection, installation, adjustment, and alignment
(13) Preventive and corrective maintenance and repair procedures

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

K921 PCREE – Testing and Maintenance

Service manuals, instructions, and procedures provided by the manufacturer shall be considered in the development of a program for maintenance of equipment.

A permanent file of instruction and maintenance manuals shall be maintained and be accessible.

The file of manuals shall be in the custody of the engineering group responsible for the maintenance of the appliance

2012 NFPA 99, 10.5.3.1.2, 10.5.6.1.1, and 10.5.6.1.2

K921 PCREE – Testing and Maintenance

Duplicate instruction and maintenance manuals shall be available to the user.

Any safety labels and condensed operating instructions on an appliance shall be maintained in legible condition.

A record shall be maintained of the tests required by this chapter and associated repairs or modifications.

2012 NFPA 99, 10.5.6.1.3, 10.5.6.1.4, and 10.5.6.2.1

K921 PCREE – Testing and Maintenance

At a minimum, the record shall contain all of the following:
(1) Date
(2) Unique identification of the equipment tested
(3) Indication of which items have met or have failed to meet the performance requirements of 10.5.6.2

A log of test results and repairs shall be maintained and kept for a period of time in accordance with a health care facility's record retention policy.

2012 NFPA 99, 10.5.6.2.2, and 10.5.6.3

K921 PCREE – Testing and Maintenance

Personnel concerned for the application or maintenance of electric appliances shall be trained on the risks associated with their use.

The health care facilities shall provide programs of continuing education for its personnel.

2012 NFPA 99, 10.5.8.1, and 10.5.8.1.1

Remember! If It's Not Documented . . . It Didn't Happen!

K291 - Testing of **all** emergency lighting monthly for 30 seconds, this includes the exit discharge to the public way 2012 NFPA 101, 7.9.3

K531 – All elevator's equipped with fire fighters' emergency operations shall test this operation monthly 2012 NFPA 101, 9.4.6

Existing elevators with a travel distance of 25' or more above or below the level that best meets the requirements of rescue personnel shall have the fire fighters' emergency operations 2012 NFPA 101, 9.4.3.2

The following are some Emergency Preparedness E Tags, this does not include all of the Emergency Preparedness E Tags.

E0004 Emergency Plan

Develop and maintain an emergency preparedness plan and it must be **reviewed**, and **updated** at least **annually**.

42 CFR 483.73 (a)

E0006 Risk Assessments

Be based on and include a documented, **facility-based** and **community-based** risk assessment, utilizing an all-hazards approach, including missing residents.

Reviewed and updated annually

42 CFR 483.73 (a) (1) – (2)

E0015 Subsistence Needs

The provisions of subsistence needs for staff and patients whether they evacuate or shelter in place, include, but are not limited to the following:

- Food, water and pharmaceutical supplies

42 CFR 483.73 (b) (1)

E0015 Subsistence Needs

- Alternate sources of energy to maintain the following:
  - **Temperatures to protect patient health and safety** and for the safe and sanitary storage of provisions (specifically **how** will the facility maintain temperatures)
  - Emergency Lighting
  - Fire detection, extinguishing, and alarm systems
  - Sewage and waste disposal

42 CFR 483.73 (b) (1)

E0031 Emergency Officials Contact Information

Must include the contact information for the following:

(i) Federal, State, tribal, regional, or local emergency preparedness staff
(ii) State Licensing and Certification Agency
(iii) Office of the State Long-Term Care Ombudsman
(iv) Other sources of assistance

Reviewed and updated annually

42 CFR 483.73 (c) (2)

E0035 Family Notifications

Method for sharing information from the emergency plan, that the facility has determined appropriate, with residents and their families or representatives.

Reviewed and updated annually.

42 CFR 483.73 (c) (8)

E0036 Training and Testing

Develop and maintain a training and testing program based on the facility's emergency plan, risk assessment, policies and procedures, and communication plan.

Reviewed and updated annually.

42 CFR 483.73 (d)

E0039 Testing Requirements

(iii) Analyze the response to and maintain documentation of drills, tabletop exercises, and emergency events, and revise as needed.

***After Action Report (AAR)**:*

- *Staff feedback*
- *Description of who did what and just more details*
- *Report on responses to emergency – good and bad*
- *How to improve*
- *Sign-in Sheet*

42 CFR 483.73 (d) (2)

Nursing Home Study

From 2004 to 2005, the Office of the Inspector General (OIG) commissioned a study entitled "Nursing Home Emergency Preparedness and Responses during Recent Hurricanes."

The study found that nursing homes in the Gulf States experienced problems even though they were in compliance with Federal interpretive guidelines for emergency preparedness.

The main reasons for the problems were lack of effective planning, failure to execute emergency plans properly, failure to anticipate the specific problems encountered, and failure to adjust decisions and actions to specific situations.

Plan Review

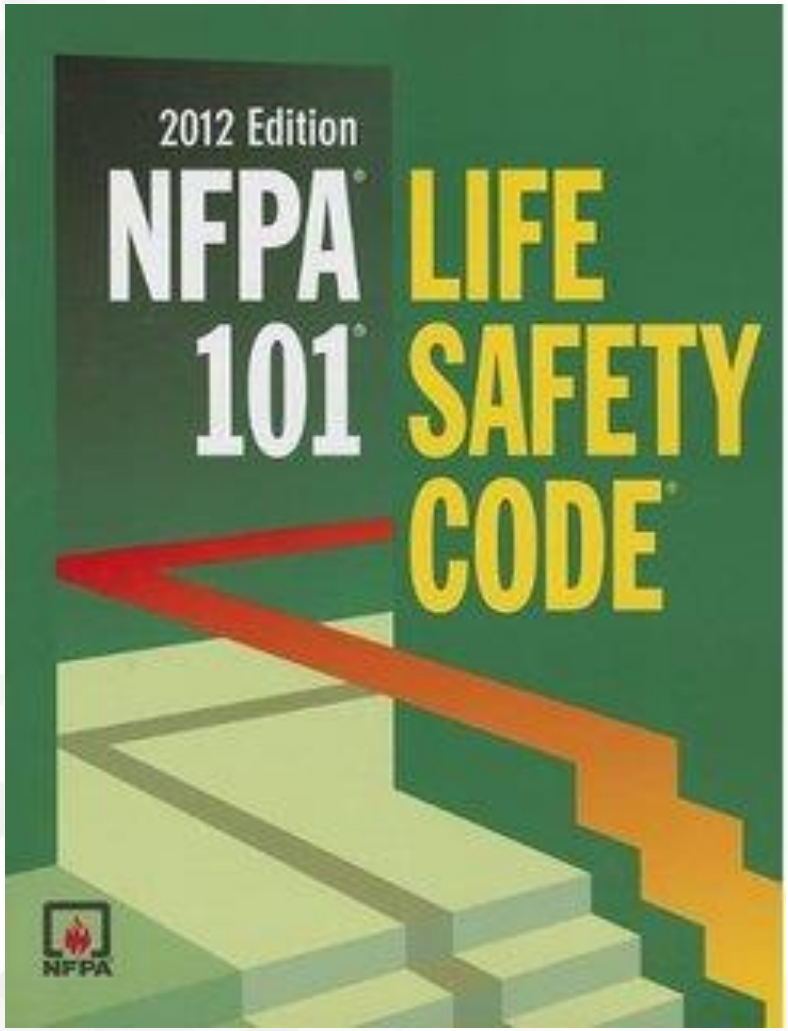
Does My Project Need to be Submitted for Review? "No"

- Routine Maintenance
- Painting
- Patching
- Repairing or replacing broken items
- Egress routes not affected

Does My Project Need to be Submitted for Review? "Yes"

- Repairs require closing off exit door or exit corridor
- Replacing existing equipment and adding new equipment
- Constructing new walls to create new rooms
- Upgrading or modifying fire alarm system
- Upgrading or modifying generator system
- Upgrading or modifying medical gas system
- Upgrading or modifying electrical system
- Upgrading or modifying mechanical system

Essential 2012 NFPA Code



$112

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Essential 2012 NFPA Code

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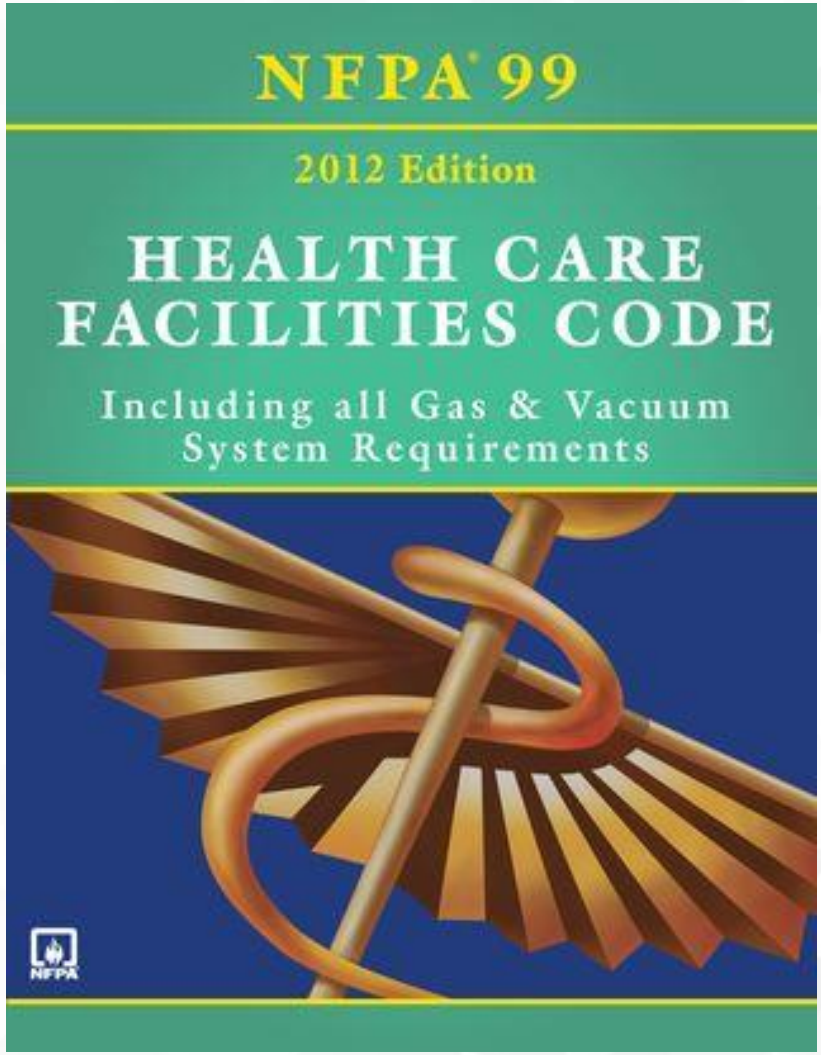

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NFPA Standards

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2010 NFPA 10, Fire Extinguishers
2010 NFPA 13, Sprinkler Systems
2009 NFPA 17A, Wet Extinguishing
2011 NFPA 25, Sprinkler Testing
2011 NFPA 70, Electrical (NEC)
2010 NFPA 72, Fire Alarm
2010 NFPA 80, Fire Doors
2011 NFPA 96, Commercial Cooking
2010 NFPA 105, Smoke Doors
2010 NFPA 110, Emergency Power


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